



MOBILE PHONE ADDICTION AND ACADEMIC ACHIEVEMENT AMONG HIGH SCHOOL

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ABSTRACT

This study attempted to estimate the Mobile phone addiction and academic achievement of the High School Students of Ballari.

The students completed mobile phone addiction scale developed by Dr.A.Velayudhan, Dr.S, Srividya.. Following hypothesis were formulated for the present study.

1.The levels of mobile phone addiction are not uniformly distributed among High School Students. 2.The levels of academic achievement are not uniformly distributed among High School Students.3. mobile phone addiction and academic achievement are significantly related to each other. 4. Demographic variables (gender, type of institution, medium) have significant influence over mobile phone addiction of the High School Students. 5. Demographic variables (gender, type of institution, medium) have significant influence over academic achievement of the High School Students.

Statistical methods like descriptive statistics (mean, S. D, frequency and percent) and inferential stratifies-chi- square, ANOVA-2 way was applied using SPSS software. A majority of 99.5% of the High School Students was found to have high levels addiction and 0.5% of them had moderate levels of addiction and none of them had low levels of addiction. Male and female High School Students had statistically equal scores. High School Students from English medium were more addicted to mobile phone addiction from Kannada medium. High School Students studying in private institutions scored significantly higher than High School Students studying in Government institutions. High School Students studying in Kannada and English



medium are same statistically contributed for the non- significant difference. Strategies for reducing mobile phone addiction and academic achievement have been delineated.

Key word: Mobile *phone addiction, Academic achievement, College students*

REVIEW OF LITERATURE

Review of literature on mobile phone addiction

Maya *et al.* (2019): Mobile phone addiction among High School Students has become a concern for all. To focuses have been given to Internet addiction, but comprehensive overview of mobile phone addiction is lacking. The study aimed to provide a comprehensive overview of mobile phone addiction among children and High School Students. The prevalence of problematic mobile phone use was found to be 6.3% in the overall population (6.1% among boys and 6.5% among girls), whereas another study found 16% among the High School Students.

The review finds that excessive or overuse of mobile phone was associated with feeling insecurity; staying up late at night; impaired parent-child relationship; impaired school relationships; psychological problems such as behavioural addiction like compulsive buying and pathological gambling, low mood, tension and anxiety, leisure boredom, and behavioural problems, among which most pronounced association was observed for hyperactivity followed by conduct problems and emotional symptoms. Though mobile phone use helps in maintaining social relationship, mobile phone addiction among children and High School Students needs urgent attention. Interventional studies are needed to address these emerging issues.

Navya Gangadharan *et al* (2022): The advancements in mobile phones from simple basic phones to featured phones and smart phones resulted in the penetration of technology to different groups of people irrespective of age, gender, or region. Thus, mobile phone addiction has evolved as a form of behavioural addiction found to be increasingly prevalent among High School Students too. The study aimed to determine the prevalence of mobile phone addiction among High School



Students and its associated risk factors among High School Students. A community-based, cross-sectional study was conducted among 264 High School Students (10-19 years) of low-income urban areas of Delhi. The prevalence of mobile phone addiction in the participants was 33.0% (95% CI: 27.2-38.6). The addiction was higher among boys (33.6%) than girls (32.3%) ($p=0.835$). Mobile phone addiction was found to be significantly higher among those High School Students who had ≥ 3 siblings, those belonging to nuclear families, and among late-onset users (≥ 16 years). Late-onset users (adjusted odds ratio {aOR}: 3.398; 95% CI: 1.307-8.833) and ≥ 3 siblings (aOR: 1.980; 95% CI: 1.141-3.437) were independent predictors of mobile phone addiction. The mean time spent on mobile phones was significantly higher among those with addiction but no significant gender difference was found between time spent on phones and addiction. The high prevalence of mobile phone addiction found in our study is an indication of the potential public health concern posed by mobile phone use among High School Students in urban settings. Hence, it is essential to limit the access to mobile phones for important utility purposes for High School Students.

Richter. (2022) This survey study explored age recommendations for phone ownership among a diverse panel of youths, as their experiences are an important contribution to the development of ownership guidelines. Participants were recruited from My Voice, a national panel of over 765 youth (14 to 24 years old) who respond to weekly SMS text message-based surveys. Questions were distributed between January 24 2018, and March 20, 2018. Inductive qualitative analysis was used to identify major themes among youths' open-ended responses. In all, 469 youth (mean age 18.8 years; female: 299/469, 63.8%; White race: 332/468, 70.8%) responded. On average, respondents obtained their first phone at 12.2 years of age. Most participants (325/459, 71.1%) stated they received their first phone out of necessity rather than for entertainment or social reasons. Youth recommended that early High School Students receive their first phone between 12 and 13 years of age primarily for reasons of necessity



(146/44832.6%). According to the participants, phones supported safety and independence by allowing communication with parents and participation in activities. Youth-serving professionals and parents can incorporate these youth perspectives into shared decision-making about phone ownership among families. This can include discussions about essential features, safety, or phone use, as well as maturity and responsibility milestones, which were all key considerations reported by participants in the survey.

Kulkarni *et al* (2019) *The study* Keeping in mind about the rapid advancement and extensive use of mobile phones, and their immense effect on communication and interactions, it is important to study potential negative health effects of mobile phone exposure especially among High School Students. **Material and Methods:** A cross-sectional study was conducted to assess Smartphone use and sleep disturbances, depression in High School Students among 469 High School Students studying in Government Polytechnic college, Vizianagaram using a structured questionnaire containing details of demographics, educational status, purpose of using the smart phone etc, PSQI and DASS 21 for sleep quality, depression stress and anxiety. **Results:** The prevalence of smart phone addiction among participants was 29.63% (30.08% in males and 29.21% in females). Factors associated with smart phone addiction in male students were use of gaming apps and internet surfing. Significant factors for female students were use of use of social networking services and communication services (Calling and texting). Depression, anxiety and quality of sleep are significantly associated with smart phone addiction. **Conclusion:** Smartphone addiction was common among the polytechnic students investigated. This study Identified associations between smart phone usage, psycho-behavioural factors, and smart phone addiction, and the associations differed between males and females. These results suggest the need for interventions to reduce smart phone addiction among degree students. The results of this study suggest that High School Students might benefit from education regarding sleep hygiene and the risks of electronic media use at night.



Cha.(2018) This study aimed to examine smart phone use patterns, smart phone addiction characteristics, and the predictive factors of the smart phone addiction in middle school students in South Korea. According to the Smartphone Addiction Proneness Scale scores, 563 (30.9%) were classified as a risk group for smart phone addiction and 1261 (69.1%) were identified as a normal user group. The High School Students used mobile messengers for the longest, followed by Internet surfing, gaming, and social networking service use. The two groups showed significant differences in smart phone use duration, awareness of game overuse, and purposes of playing games. The predictive factors of smart phone addiction were daily smart phone and social networking service use duration, and the awareness of game overuse.

Severin Haug,*et al.*(2015):\Smartphone addiction, its association with smart phone use, and its predictors have not yet been studied in a European sample. This study investigated indicators of smart phone use, smart phone addiction, and their associations with demographic and health behaviour-related variables in young people. A convenience sample of 1,519 students from 127 Swiss vocational school classes participated in a survey assessing demographic and health-related characteristics as well as indicators of smart phone use and addiction. Smartphone addiction was assessed using a short version of the Smartphone Addiction Scale for High School Students (SAS-SV). Logistic regression analyses were conducted to investigate demographic and health-related predictors of smart phone addiction. Smartphone addiction occurred in 256 (16.9%) of the 1,519 students. Longer duration of smart phone use on a typical day, a shorter time period until first smart phone use in the morning, and reporting that social networking was the most personally relevant smart phone function were associated with smart phone addiction. Smartphone addiction was more prevalent in younger High School Students (15–16 years) compared with young adults (19 years and older), students with both parents born outside Switzerland, persons reporting lower physical activity, and those reporting higher stress. Alcohol and tobacco consumption were unrelated to smart phone addiction. Different indicators of smart phone use are associated with smart phone addiction and subgroups of young people have a



higher prevalence of smart phone addiction. The study provides the first insights into smart phone use, smart phone addiction, and predictors of smart phone addiction in young people from a European country, which should be extended in further studies.

Review of literature on academic achievement.

Sarwat Masud (2019): Academic performance is among the several components of academic success. Many factors, including socioeconomic status, student temperament and motivation, peer, and parental support influence academic performance. Our study aims to investigate the determinants of academic performance with emphasis on the role of parental styles in High School Students in Peshawar, Pakistan. A total of 456 students from 4 public and 4 private schools were interviewed. Academic performance was assessed based on self-reported grades in the latest internal examinations. Parenting styles were assessed through the administration of the Parental Bonding Instrument (PBI). Regression analysis was conducted to assess the influence of socio-demographic factors and parenting styles on academic performance. Factors associated with and differences between “care” and “overprotection” scores of fathers and mothers were analyzed. Higher socio-economic status, father’s education level, and higher care scores were independently associated with better academic performance in High School Students. Affectionless control was the most common parenting style for fathers and mothers. When adapted by the father, it was also the only parenting style independently improving academic performance. Overall, mean “care” scores were higher for mothers and mean “overprotection” scores were higher for fathers. Parenting workshops and school activities emphasizing the involvement of mothers and fathers in the parenting of High School Students might have a positive influence on their academic performance. Affectionless control may be associated with improved academics but the emotional and psychosocial effects of this style of parenting need to be investigated before recommendations are made.



Brew *et al.* (2021): The good academic performance of students at the Senior High School is of paramount importance in every educational system. Meanwhile, numerous factors influence the academic performance of students and have been researched, but many problems persist. A literature review in this area would provide the gaps and areas that need more research and will go a long way to curb the situation. The current paper used a narrative review method to review the literature on the academic performance of students at Senior High Schools and various factors affecting students' performance. The paper elucidated how these factors negatively affect academic performance and the need for them to be minimized to improve students' academic performance. The study found out that, truancy affects academic performance drastically and sometimes even leads to school dropout. Also, the study found out that other factors such as students' parental levels of education and income, textbooks availability and accessibility, libraries, practical laboratory, meals provision and teachers have tremendous effects on the academic performance of students at school. Students who are above average academically and are positively exposed to these factors are likely to perform better as compared to those who are less exposed to these factors. The study recommends that factors such as truancy, parental levels of education and income, textbooks availability and accessibility, libraries, practical laboratory, meals provision and teachers should be regularly monitored and adjusted to meet students' needs and aspirations. This will go a long way to improve the academic performance of students and hence allow them to achieve their aims in life.

The development of the concept of college student academic achievement can be traced back to 1966, when the Cooperative Institution Research Program (CIRP) was created by the American Council on Education. After the 1960s, the emphasis on the academic achievement of college students led to the expansion of the CIRP beyond the academic outcomes of students to the learning process of students (Jury *et al.*, 2018).



Review of literature on mobile phone addiction and academic achievement among High School Student and College Students

Nikita Nehra (2022): Electronic screens are so enticing that it's hard for High School Students to avoid their addiction to gadgets like smart phones. Smart phones bring many benefits when used for their basic intended purposes, but excessive use of smart phones might turn problematic and consequently, impairs well-being, negatively impacts academic performance, and leads to various psychological and physical complications among High School Students. This aims to investigate the impact of smart phone addiction on the academic performance of High School Students, especially among secondary and senior secondary school students in Rajasthan. The data was collected from a sample of 425 randomly selected students in the age group of 13-19 years through an online questionnaire. The findings suggest two important aspects to understand the impact of smart phone addiction on the academic performance of High School Students. The negative aspect indicates that excessive smart phone use by High School Students negatively impacts their learning and academic performance, while the positive aspect indicates that the use of smart phones by High School Students increases their skills and cognitive abilities, thereby improving their academic performance. The study recommends that good strategies should be encouraged in all educational settings to promote the proper and healthy use of smart phones among students.

Rui Gao (2021) The problem of mobile phone addiction and academic procrastination among medical students has been widely acknowledged. This study aimed to explore the influence of demographic factors on mobile phone addiction, academic procrastination, and academic achievement among medical students. Further, it investigated the association between mobile phone addiction, academic procrastination, and academic achievement. This cross-sectional study was conducted between May and June 2019. A total of 3 511 medical students participated in an online questionnaire survey (effective response rate = 81.7%). Demographic factors, the Scale of Academic Achievement, the short scale of the Mobile Phone Problem Use (MPPUS-



10), and the Academic Procrastination Scale–Short (APS-S) were used. Hierarchical multiple regression analysis revealed that the average scores for academic procrastination, mobile phone addiction, and academic achievement were 2.66 ± 0.91 , 5.13 ± 1.53 , and 4.51 ± 0.71 , respectively. Moreover, there were significant differences in gender, grade, leadership experience, and family monthly income across mobile phone addiction, academic procrastination, and academic achievement. Mobile phone addiction was negatively associated with learning dedication, learning performance, and relationship facilitation. Academic procrastination was negatively associated with learning dedication, learning performance, relationship facilitation, and objective achievement. Mobile phone addiction and academic procrastination was revealed as prevalent among Chinese medical students, and negatively influences their academic achievement. It is critical to establish a more efficient learning environment for Chinese medical students to minimize the negative impact of mobile phone addiction and academic procrastination.

Ahlam *et al* (2020) This study aims to identify how addiction to mobile phone usage affects academic performance. Mobile phone addiction has become a deterrent in student learning as teenagers may focus totally on their mobile phones to a point that they become dependent on them. In turn, dependence on mobile phones in their daily lives may affect teen academic performance. This study investigates mobile phone usage among teens and how it impacts their concentration on academic matters. A quantitative approach was undertaken to determine how the level of mobile phone addiction could affect their academic performance. A total of 200 respondents among secondary school students in Shah Alam were selected through purposive sampling. The questionnaire was designed in two sections, which consisted of demographic information and mobile phone usage behaviours that influence academic performance. The results show that the more the students use their mobile phones, the more it will affect their academic performance. In other words, addiction to mobile phones will affect the student's



academic performance. Thus, student attention may divert away from their academics if they have high addiction to their mobile phones. As a result of this study, it has been validated that mobile phones have transformed communication and connectivity among members of the public, students in particular, and that these objects have become indispensable in this contemporary era.

Bharathi (2021) The addition to use of mobile phone for communication people used cell phone for many features such as games access to the internet and social networks messaging, alarm, navigation. The concept and ideas of the High School Students with excessive mobile phone use leads to stress College student are the most rapid adopters of cell phone technology and research suggests association between cell phone use and their health and academic achievement with the direction of the latter association being partly determined by the nature of task a student is engaged in when using the cell phone. The samples of this study were college students with the age group (18-20) years were available during the time of data collection at Bharath University, Tambaram. A sample size of 30 college students with 18-20 years selected for this study. This chapter enlightens the importance of their research and reveals the effects of stress among college students

Marco Gui(2021) Over the past decade, smart phones have permeated all domains of High School Students' everyday lives, with research dominated by "smart phone addiction." This study compares one of the most used measures of smart phone addiction with a new alternative measure, the Smartphone Pervasiveness Scale for High School Students (SPS-A), which focuses on the frequency of smart phone use at key social and physiological moments of daily life. A sample of 3,289 Italian high school students was used to validate the two constructs and compare their suitability for research on academic performance. SPS-A was moderately correlated with smart phone addiction, showed measurement invariance (across ethnic origins, parental education, and gender), and negatively predicted language and math test scores. SPS-A is a non



pathologizing instrument suitable for analyzing the role of smart phone use in academic achievement in combination with students' social backgrounds.

OBJECTIVES

The objectives formulated for the study were:

1. To study the extent of Mobile Phone addiction and Academic Achievement among High School Students.
2. To study the influence of Mobile Phone addiction on among High School Students.
3. To study the influence of Mobile Phone addiction on Academic Achievement.
4. To study the influence of demographic variables (Gender, Type of College, Class, Area), on mobile phone addiction and academic achievement.

HYPOTHESES

1. The levels of mobile phone addiction are not uniformly distributed among High School Students.

1. The levels of academic achievement are not uniformly distributed among High School Students.
2. mobile phone addiction and academic achievement are significantly related to each other.
3. Demographic variables (gender, type of institution, medium) have significant influence over mobile phone addiction of the High School Students.
4. Demographic variables (gender, type of institution, medium) have significant influence over academic achievement of the High School Students.

METHOD ADOPTED FOR THE PRESENT STUDY

The main objective of the study was to assist of mobile addiction and adolescence among academic achievement. The methodology to be employed was survey method. Survey is a popular method of data collection to collect data on a large scale. Survey is used for the



techniques of investigation when adequate information about certain problem is not available in records, file and other sources. A survey, usually, as a structural containing a set of questions that are close-up ended. The data obtained by survey method was analyzed in terms of both descriptive and inferential statistics.

Data Distribution

Class	Type of the degree colleges						Total
	Government		Private		Total		
	Boys	Girls	Boys	Girls	Boys	Girls	Total
9 th	25	25	25	25	50	50	100
10 th	25	25	25	25	50	50	100
	50	50	50	50	100	100	200



ANALYSIS OF RESULTS

DEMOGRAPHY AND LEVELS MOBILE PHONE ADDICTION AND ACADEMIC ACHIEVEMENT

Demographic variables of the sample selected

Variables	Sub variable	Frequency	Percent
Total	-	200	100.0
Class	2nd year	100	50.0
	3rd year	100	50.0
Medium	Kannada	53	26.5
	English	147	73.5
Type of institution	Government	100	50.0
	Private	100	50.0
Gender	Male	100	50.0
	Female	100	50.0
SES	Low Income	61	30.5
	Middle Income	132	66.0



	High Income	7	3.5
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A total of 240 High School Students were randomly selected from the schools/colleges for the present study. 100 each of them were selected from second and third year degree courses. Media of instruction of the students revealed that 26.5% of them studying in Kannada medium and 73.5% of them studied in English medium. Out of 200 samples, 100 each of them were from government and private colleges respectively. This was true for gender also, where 100 students each constituted the sample as male and female students respectively. Of the 200 samples, a large majority of them Socio-economic status of the samples revealed that majority of the sample belonged to middle income group to an extent of 66%, 30.5% of them belonged to low income group and only 3.5% of them belonged to high income group.

H1: The levels of mobile phone addiction are not uniformly distributed among High School Students

Table 4.2

Frequency and percent responses on levels mobile phone addiction of High School Students and results of chi-square tests

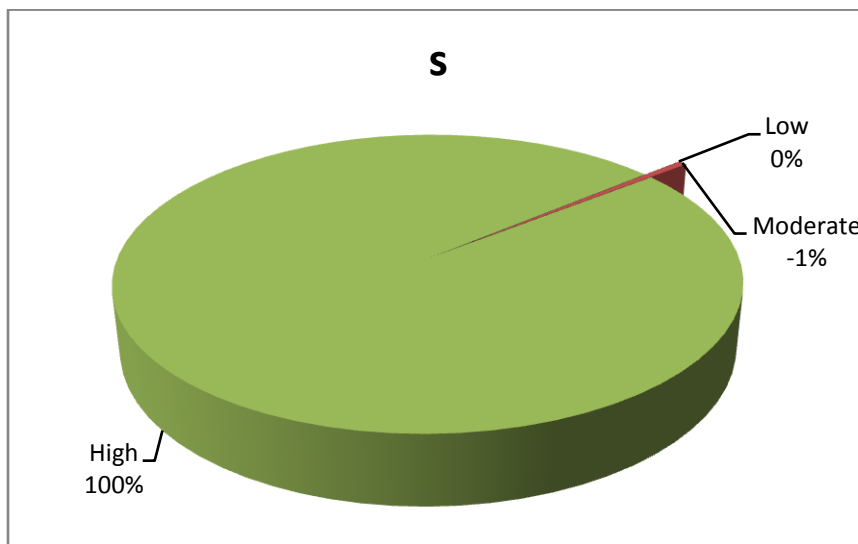
Variable	Levels	Frequency	Percent	Test statistics
Mobile addiction	Low	-	-	$X^2=196.020$; p=.001
	Moderate	1	.5	
	High	199	99.5	
	Total	200	100	

A large majority of 99.5% of the students selected had high levels addiction to mobile, followed by 0.5% of them had moderate levels of addiction and none of them had low levels of mobile addiction. Chi-square test revealed a significant frequency difference between groups of

frequencies of levels of mobile addiction with chi-square value of 196.20 and significance level of .001, further confirming that a large majority of them had high levels addiction to mobile.

Graph 4.1

Frequency and percent responses on levels of mobile phone addiction of the students



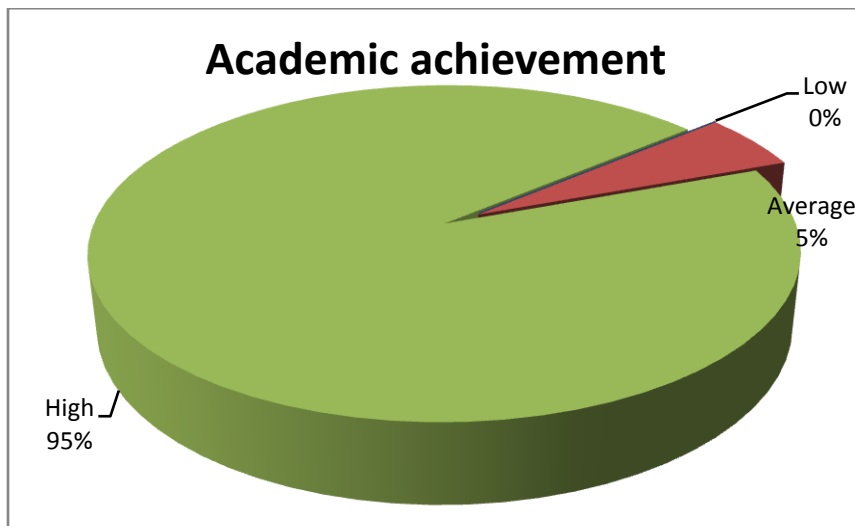
H2: The levels of academic achievement are not uniformly distributed among High School Students

Variable	Levels	Frequency	Percent	Test statistics
Academic achievement	Low	-	-	$X^2=158.420$; $p=.001$
	Average	11	5.5	
	High	189	94.5	
	Total	200	100	

Out of 200 students, a large majority of 94.5% of them had high levels of academic achievement, 5.5% of them had average levels of academic achievement, and none of them possessed low levels of academic achievement. Chi-square test revealed a significant frequency difference between groups of levels of academic achievement with chi-square value of 158.420 and significance level of .001, further confirming that majority of them had high levels of academic achievement.

Graph 4.2

Distribution of the selected sample by levels of academic achievement



H3: mobile phone addiction and academic achievement are significantly related to each other

Variable 1	Variable 2	Correlation coefficient	P value
Components of mobile addiction			
Maladaptive usage	Academic achievement	-.261	.001
Self expression	Academic achievement	-.277	.001

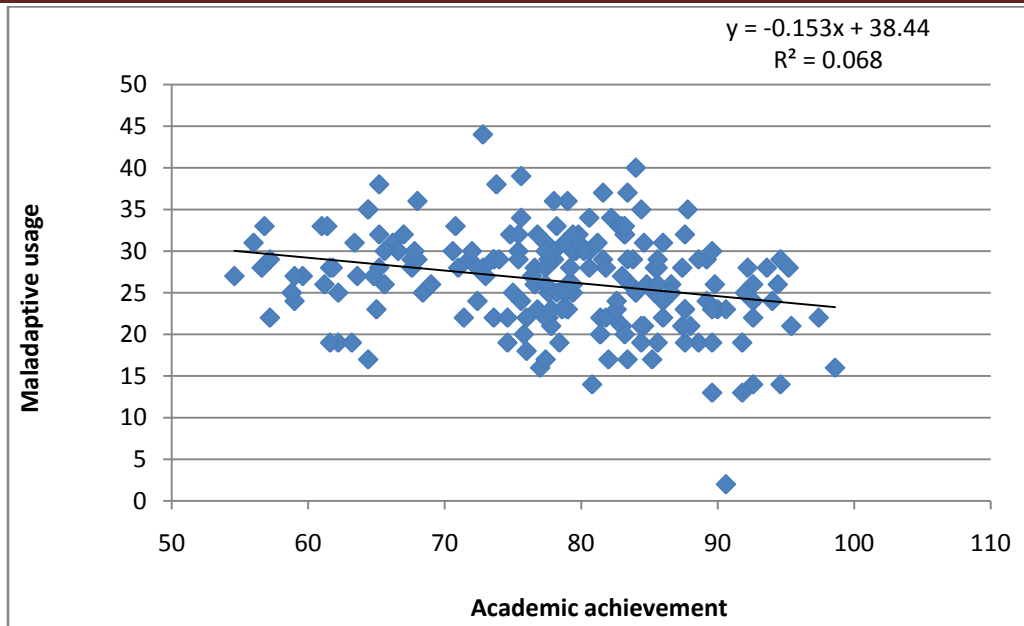


Peer relationship	Academic achievement	-.094	.186
Interpersonal relation	Academic achievement	-.083	.243
Impulsivity	Academic achievement	-.116	.102
Usage Time	Academic achievement	-.165	.020
Mobile phone addiction total scores	Academic achievement	-.290	.001

Few of the components of mobile addiction were significantly and negatively related to academic achievement of the students. Maladaptive usage ($r=-.261$; $p=.001$), component, Self-expression component ($r=-.277$; $p=.001$), sage time component ($r=-.165$; $p=.020$) and total mobile addiction scores ($r=-.290$; $p=.001$), were significantly and negatively related academic achievement scores, higher the scores in Maladaptive usage, Self-expression, Usage Time components and in total mobile addiction, lower was the academic achievement and vice-versa..

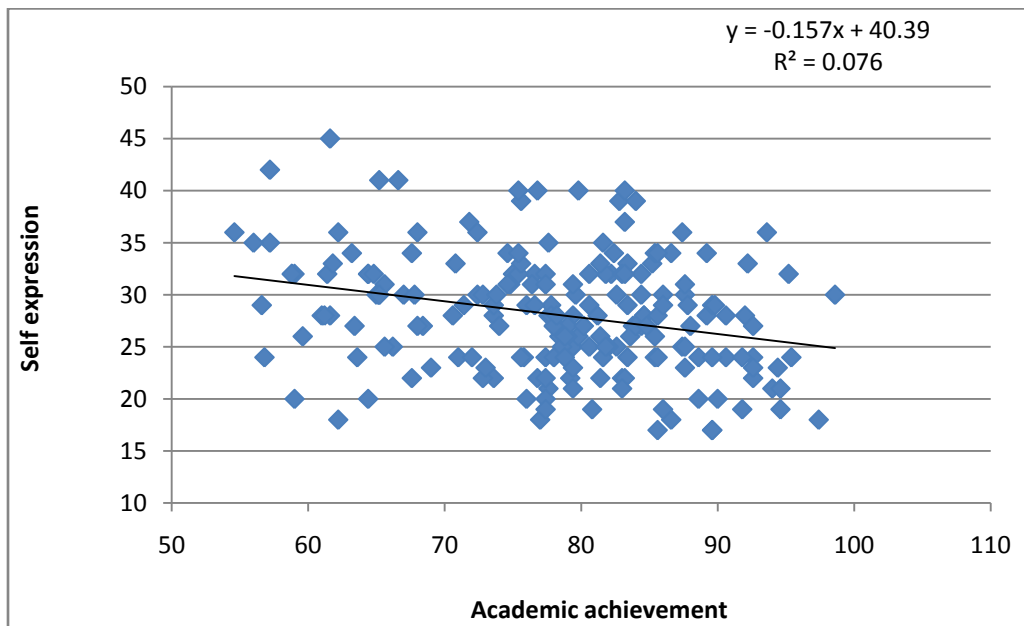
However, few of the components of mobile addiction like Peer relationship, Interpersonal relation, and Impulsivity were not significantly related to academic achievement of the students.

Scatter gram between maladaptive usage and academic achievement



Graph 4.4

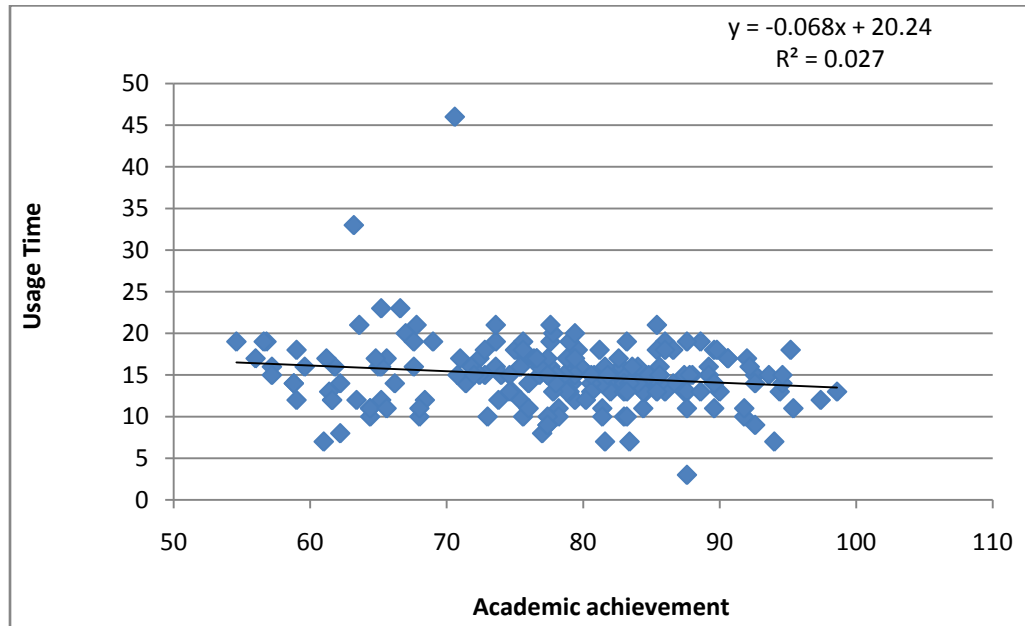
Scattergram between self expression and academic achievement



Graph 4.5

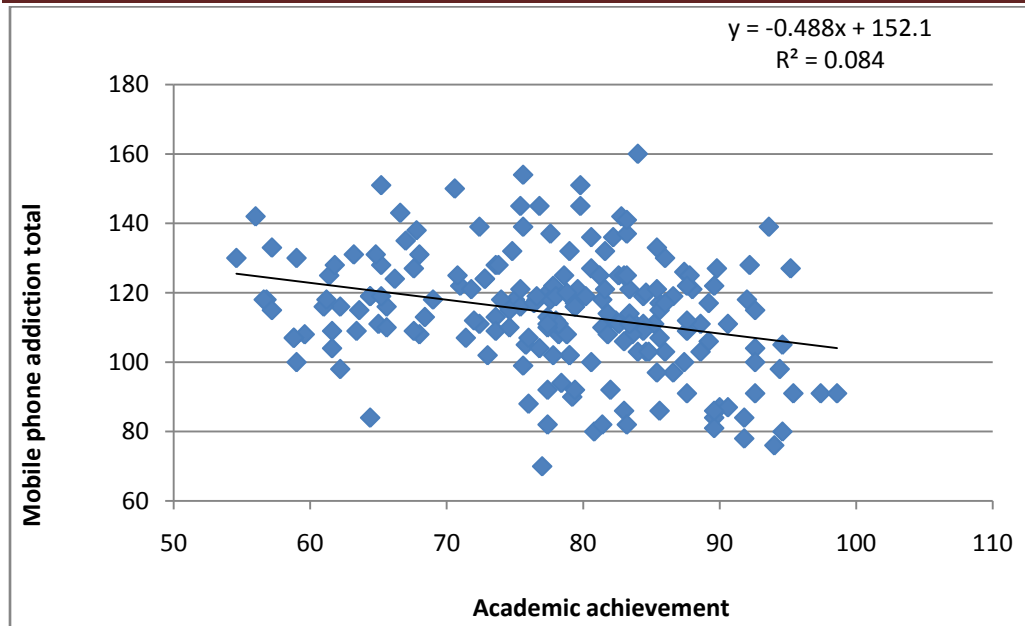


Scatter gram between usage time and academic achievement



Graph 4.6

Scatter gram between usage time and academic achievement



SECTION III: INFLUENCE OF DEMOGRAPHIC FACTORS ON MOBILE PHONE ADDICTION

H4: Demographic variables (gender, type of institution, medium) have significant influence over mobile phone addiction of the High School Students

Components	Gender	Mean	S.D	t value	P value
Maladaptive usage	Male	25.90	5.95	-1.283	.201
	Female	26.95	5.61		
Self expression	Male	27.74	5.23	-.926	.356
	Female	28.47	5.90		
Peer relationship	Male	18.78	3.80	-.327	.744



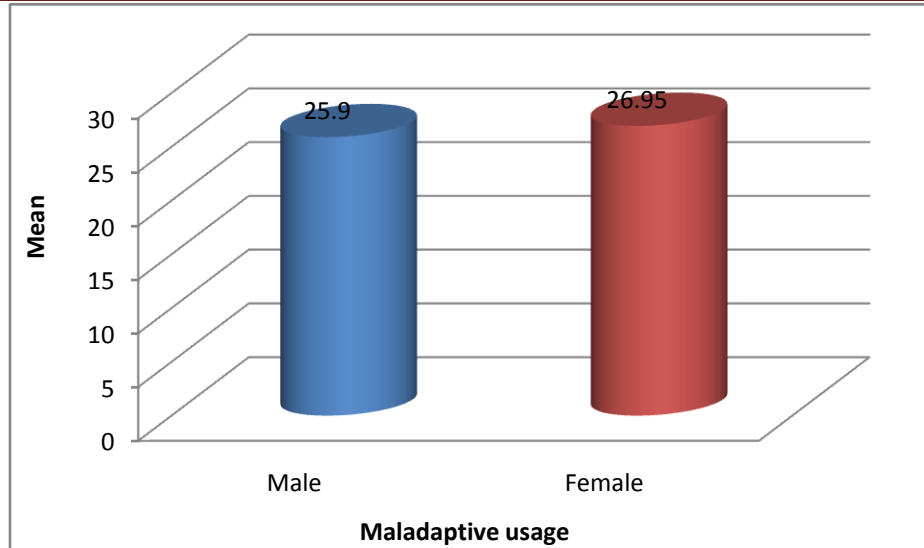
	Female	19.00	5.55		
Interpersonal relation	Male	12.95	3.12	-.094	.925
	Female	12.99	2.91		
Impulsivity	Male	12.82	3.08	.331	.741
	Female	12.67	3.33		
Usage Time	Male	15.05	4.40	.518	.605
	Female	14.75	3.76		
Mobile phone addiction total	Male	113.24	16.13	-.679	.498
	Female	114.83	16.96		

Note:df=238

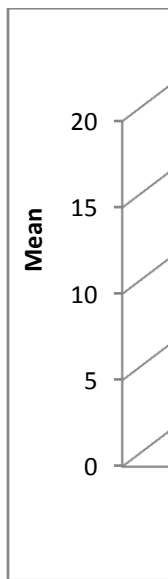
Gender of the students did not influence any component of mobile addiction, including total mobile addiction scores. The t values obtained for the mean difference between male and female adolescents for components- Maladaptive usage ($t=-4.810$; $p=.001$), Self-expression($t=-4.656$; $p=.001$), Peer relationship ($t=-3.402$; $p=.001$), Interpersonal relation($t=-5.760$; $p=.001$), Impulsivity($t=-3.019$; $p=.003$), Usage Time($t=-3.246$; $p=.001$), and for total mobile addictions scores ($t=-2.702$ $p=.007$) were all found to be non-significant. From the mean values it is clear that in all these components and total scores male and female High School Students had statistically equal scores.

Mean mobile phone addiction scores of the selected sample by type of gender for maladaptive usage

mobile addiction of the sample by gender for relationship



Mean phone scores selected type of Peer



Mean mobile phone addiction scores of selected sample by type of Institute and results of Independent samples ‘t’ tests

Components	Type of Institute	Mean	S.D	‘t’ .value	P Value
Maladaptive usage	Govt.	27.29	5.56	2.130	.034
	Pvt.	25.56	5.92		
Self expression	Govt.	28.46	5.71	.901	.369



	Pvt.	27.75	5.44		
Peer relationship	Govt.	18.77	5.33	-.357	.721
	Pvt.	19.01	4.10		
Interpersonal relation	Govt.	12.83	2.89	-.657	.512
	Pvt.	13.11	3.13		
Impulsivity	Govt.	12.41	3.43	-1.486	.139
	Pvt.	13.08	2.93		
Usage Time	Govt.	14.83	4.45	-.242	.809
	Pvt.	14.97	3.72		
Mobile phone addiction total	Govt.	114.59	16.13	.474	.636
	Pvt.	113.48	16.98		

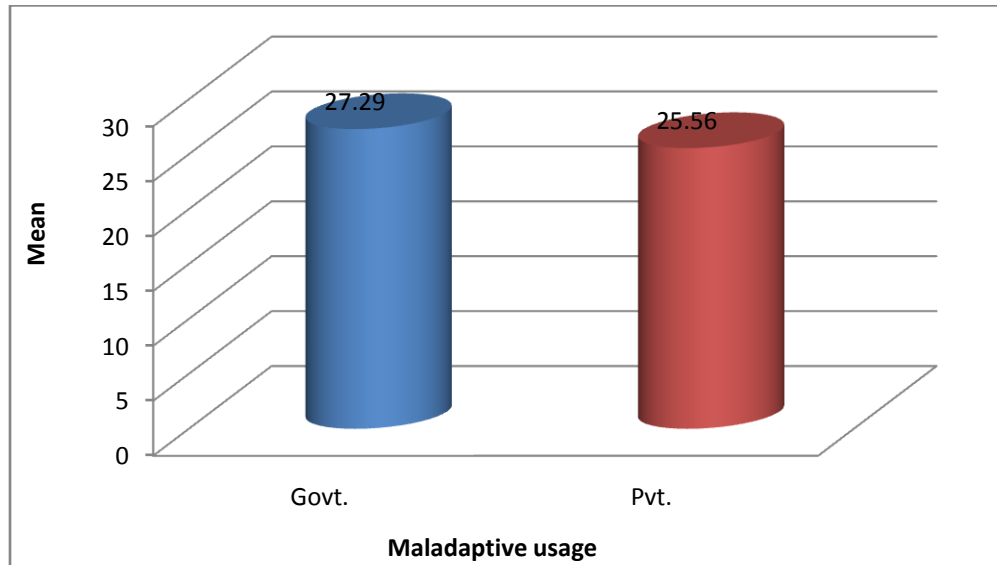
Note: df =238

Type of the institute where the students are studying had significant influence over only one component of the mobile addiction. In maladaptive usage component, t value of 2.130 for the significance of mean difference between students studying in government private institutions was found to be significant at .034 levels. From the table it is clear that students studying in government schools (mean 27.29) had significantly higher scores in maladaptive usage, compared to students studying in private colleges (mean 25.56).

However, Independent samples t tests revealed non-significant mean differences for rest of the components of mobile addiction-Self-expression, Peer relationship, Interpersonal relation, Impulsivity, Usage Time and in Mobile phone addiction total scores, revealing that students studying in government and private institutions had statistically similar scores.

Graph 4.9

Mean mobile phone addiction scores of selected sample by type of Institute



MEDIUM OF INSTRUCTION AND MOBILE PHONE ADDICTION

Mean mobile phone addiction scores of the selected sample by medium and results of ‘t’ test

Components	Medium	Mean	Std. Deviation	‘t’ .value	P Value
Maladaptive usage	Kannada	28.23	5.59	2.681	.008
	English	25.78	5.75		
Self expression	Kannada	28.77	5.45	1.019	.309
	English	27.86	5.62		
Peer relationship	Kannada	18.49	3.35	-.714	.476
	English	19.03	5.16		



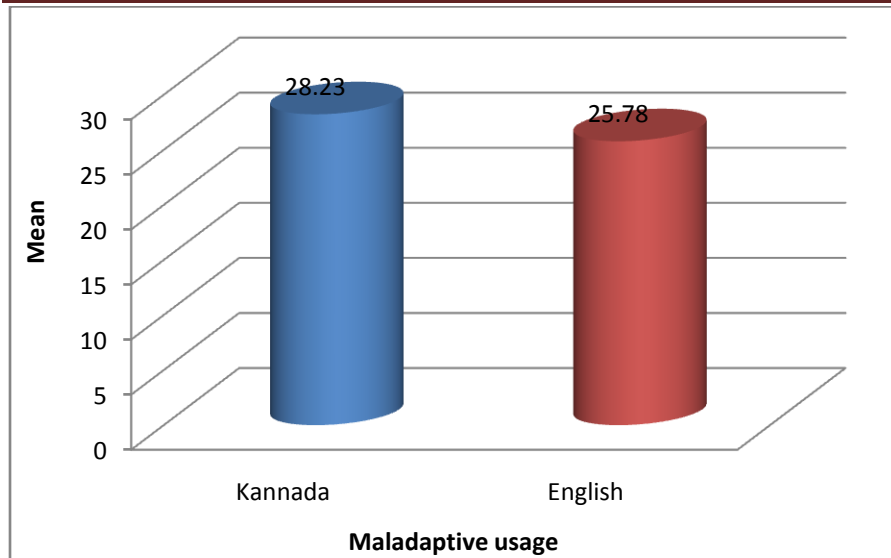
Interpersonal relation	Kannada	13.40	2.78	1.205	.230
	English	12.82	3.08		
Impulsivity	Kannada	13.21	3.67	1.230	.220
	English	12.58	3.01		
Usage Time	Kannada	15.02	5.31	.246	.806
	English	14.86	3.57		
Mobile phone addiction total	Kannada	117.11	14.42	1.588	.114
	English	112.93	17.14		

Media of instructions of the study had significant influence over only one component of the mobile addiction. In maladaptive usage component, t value of 2.681 for the significance of mean difference between students pursuing in their education in Kannada and English media, was found to be significant at .008 levels. From the table it is clear that students studying in Kannada medium (mean 28.23) had significantly higher scores in maladaptive usage, compared to students studying in English medium (mean 25.78).

However, Independent samples t tests revealed non-significant mean differences for rest of the components of mobile addiction-Self-expression, Peer relationship, Interpersonal relation, Impulsivity, Usage Time and in Mobile phone addiction total scores, revealing that students studying in Kannada and English media had statistically similar scores.

Graph 4.10

Mean mobile phone addiction scores of selected sample by medium



INFLUENCE OF DEMOGRAPHIC FACTORS ON ACADEMIC ACHIEVEMENT

H4: Demographic variables (gender, type of institution, medium) have significant influence over academic achievement of the High School Students

4.5.1: Gender and academic achievement

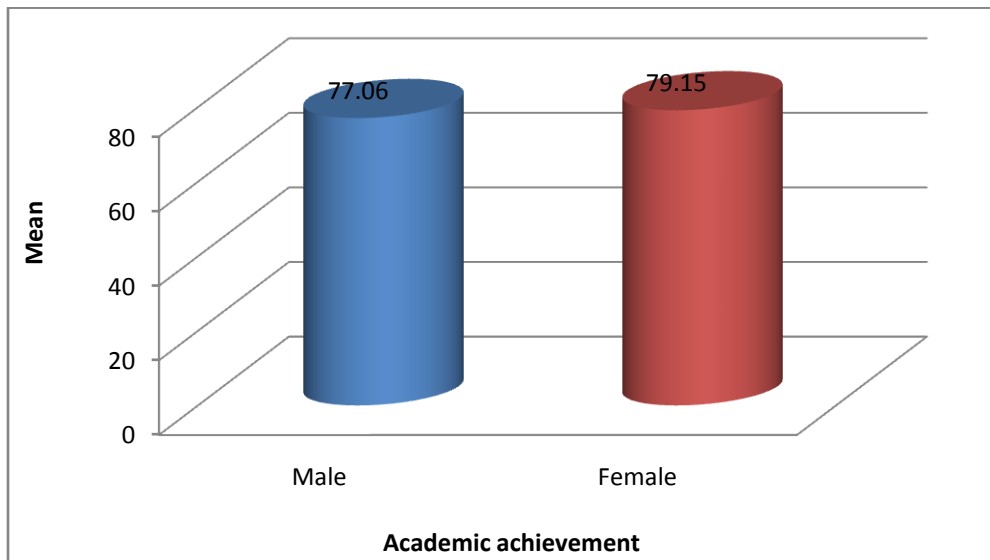
Component	Gender	Mean	Std. Deviation	't' .value	P Value
Academic achievement	Male	77.06	10.12	-1.507	.133
	Female	79.15	9.46		

Independent samples t test revealed a non-significant mean difference between male and female students in their mean academic scores. 't' value of -1.507 was found to be non-significant ($p=.133$). The mean academic achievement scores of the male and female High School Students

were 77.06 and 79.15 respectively, which are same statistically contributed for the non-significant difference.

Graph 4.11

Mean academic achievement scores of the selected sample by type of gender



4.5.2: Type of Institute and academic achievement

Table 4.9

Mean academic achievement scores of the selected sample by type of institute and results of ‘t’ test

Component	Type of Institute	Mean	Std. Deviation	‘t’ .value	P

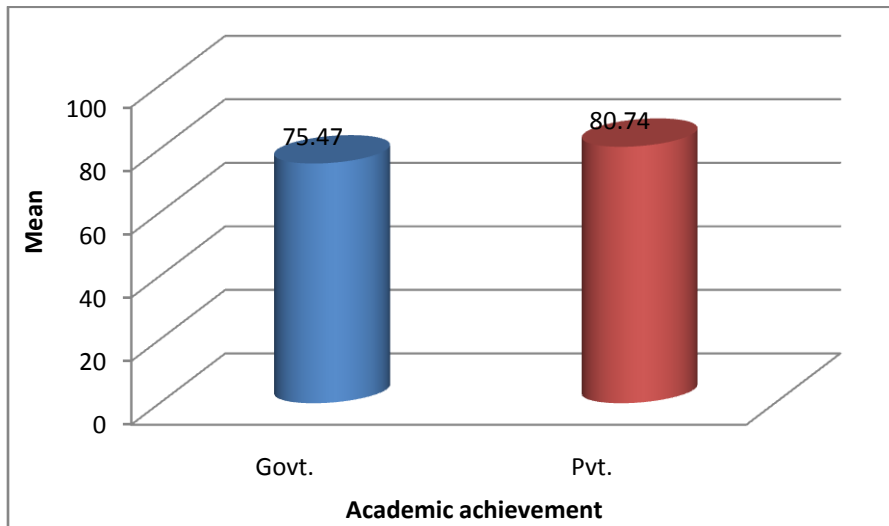


					Value
Academic achievement	Govt.	75.47	9.72	-3.923	.001
	Pvt.	80.74	9.25		

Independent samples t test revealed a significant mean difference between students studying in government and private institutions in their mean academic achievement scores. ‘t’ value of -3.293 was found to be significant at .001 level. The mean academic achievement scores of the High School Students studying in government and private institutions were 75.47 and 80.74 respectively. High School Students studying in private institutions scored significantly higher than High School Students studying in government institutions.

Graph 4.12

Mean academic achievement scores of selected sample by type of Institute





Medium of instruction and academic achievement

Mean academic achievement scores of the selected sample by medium and results of 't' test

Component	Medium	Mean	Std. Deviation	't' value	P Value
Academic achievement	Kannada	77.06	10.12	-1.507	.133
	English	79.15	9.46		

Independent samples t test revealed a non-significant mean difference between students studying in Kannada and English media in their mean academic scores. 't' value of -1.507 was found to be non-significant (p=.133). The mean academic achievement scores of the High School Students studying in Kannada and English media were 77.06 and 79.15 respectively, which are same statistically contributed for the non-significant difference.

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